(FILE 'HOME' ENTERED AT 11:31:42 ON 22 NOV 2002)

FILE 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, .' ENTERED AT 11:32:14 ON 22 NOV 2002

E BJORCK L/AU

E RASSMUSSEN M/AU

L1 8 S E3

E BJORCK L/AU

L2 1073 S E3
L3 1080 S L1 OR L2
L4 475 S L3 AND (STREPTOCOCC?)
L5 168 S L4 AND (PYOGENES)
L6 58 DUP REM L5 (110 DUPLICATES REMOVED)

=> d bib ab 16

L6 ANSWER 1 OF 58 EMBAL COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2002369035 EMBASE Alert (EMBAL)
TI **Streptococcus pyogenes** and phagocytic killing [2] (multiple letters).
AU Von Pawel-Rammingen U.; Johansson B.P.; Tapper H.; **Bjorck L.**; Lei B.; Deleo F.R.; Musser J.M.
CS U. Von Pawel-Rammingen, Department of Cell Biology, Section for Molecular Pathogenesis, Lund University, Lund, Sweden. ulrich.von_pawel@medkem.lu.se
SO Nature Medicine, (1 Oct 2002) 8/10 (1044-1046).
CODEN: NAMEF ISSN: 1078-8956
CY United States
DT Letter
LA English

=> d 16 2-58

L6 ANSWER 2 OF 58 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI
AN 2002-11891 BIOTECHDS
TI Identifying agent capable of blocking inhibitory effects of proteinase/glycosaminoglycan pathway for enhancing antimicrobial activity of cationic antimicrobial peptide, useful for treating bacterial infection;
drug screening, alpha-defensin and bacterium culture for disease therapy
AU **BJORCK L**; FRICK I; SCHMIDTCHEN A
PA HANSA MEDICAL AB
PI WO 2002006821 24 Jan 2002
AI WO 2000-EP8208 17 Jul 2000
PRAI EP 2000-306074 17 Jul 2000
DT Patent
LA English
OS WPI: 2002-257284 [30]

L6 ANSWER 3 OF 58 WPIDS (C) 2002 THOMSON DERWENT
AN 2002-257284 [30] WPIDS
DNN N2002-199196 DNC C2002-076536
TI Identifying agent capable of blocking inhibitory effects of proteinase/glycosaminoglycan pathway for enhancing antimicrobial activity of cationic antimicrobial peptide, useful for treating bacterial infection.
DC A96 B04 D16 S03
IN **BJORCK**, **L**; FRICK, I; SCHMIDTCHEN, A
PA (HANS-N) HANSA MEDICAL AB
CYC 96
PI WO 2002006821 A2 20020124 (200230)* EN 46p G01N033-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001087628 A 20020130 (200236) G01N033-00
ADT WO 2002006821 A2 WO 2001-EP8208 20010717; AU 2001087628 A AU 2001-87628 20010717

FDT AU 2001087628 A Based on WO 200206821
PRAI EP 2000-306074 20000717
IC ICM G01N033-00

L6 ANSWER 4 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34907307 BIOTECHNO
TI The regulator PerR is involved in oxidative stress response and iron homeostasis and is necessary for full virulence of **Streptococcus pyogenes**
AU Ricci S.; Janulczyk R.; **Bjorck L.**
CS S. Ricci, Department of Molecular Biology, University of Siena, Ospedale Le Scotte Piano 1S, Viale Bracci, 53100 Siena, Italy.
E-mail: riccisus@unisi.it
SO Infection and Immunity, (2002), 70/9 (4968-4976), 60 reference(s)
CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 5 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34614617 BIOTECHNO
TI IdeS, a novel **streptococcal** cysteine proteinase with unique specificity for immunoglobulin G
AU Von Pawel-Rammingen U.; Johansson B.P.; **Bjorck L.**
CS U. Von Pawel-Rammingen, Department of Molecular Biology, Section for Molecular Pathogenesis, Lund University, SE-221 84 Lund, Sweden.
E-mail: Ulrich.von_Pawel@medkem.lu.se
SO EMBO Journal, (02 APR 2002), 21/7 (1607-1615), 61 reference(s)
CODEN: EMJODG ISSN: 0261-4189
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 6 OF 58 MEDLINE
AN 2002653200 IN-PROCESS
DN 22300422 PubMed ID: 12411956
TI Erratum: **Streptococcus pyogenes** and phagocytic killing.
AU Von Pawel-Rammingen U; Johansson B P; Tapper H; **Bjorck L**
SO NATURE MEDICINE, (2002 Nov) 8 (11) 1329.
Journal code: 9502015. ISSN: 1078-8956.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20021105
Last Updated on STN: 20021105

L6 ANSWER 7 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 3
AN 2002369035 EMBASE
TI **Streptococcus pyogenes** and phagocytic killing [2] (multiple letters).
AU Von Pawel-Rammingen U.; Johansson B.P.; Tapper H.; **Bjorck L.**; Lei B.; Deleo F.R.; Musser J.M.
CS U. Von Pawel-Rammingen, Department of Cell Biology, Section for Molecular Pathogenesis, Lund University, Lund, Sweden. ulrich.von_pawel@medkem.lu.se
SO Nature Medicine, (1 Oct 2002) 8/10 (1044-1046).
ISSN: 1078-8956 CODEN: NAMEFI
CY United States
DT Journal; Letter
FS 004 Microbiology

026 Immunology, Serology and Transplantation
LA English

L6 ANSWER 8 OF 58 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 2002:819345 SCISEARCH
GA The Genuine Article (R) Number: 599AN
TI **Streptococcus pyogenes** and phagocytic killing
AU von Pawel-Rammingen U (Reprint); Johansson B P; Tapper H; **Bjorck L**
CS Lund Univ, Dept Cell & Mol Biol, Sect Mol Pathogenesis; Lund, Sweden (Reprint)
CYA Sweden
SO NATURE MEDICINE, (OCT 2002) Vol. 8, No. 10, pp. 1043-1044.
Publisher: NATURE AMERICA INC, 345 PARK AVE SOUTH, NEW YORK, NY 10010-1707 USA.
ISSN: 1078-8956.
DT Letter; Journal
LA English
REC Reference Count: 0

L6 ANSWER 9 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34535529 BIOTECHNO
TI Uptake and intracellular transportation of a bacterial surface protein in lymphoid cells
AU Frick I.-M.; Axcrona K.; Hardig Y.; Tapper H.; Gustafsson L.; Kellner R.; Leanderson T.; **Bjorck L.**
CS I.-M. Frick, Department of Cell Biology, Lund University, BMC, Tornavagen 10, S-221 84 Lund, Sweden.
E-mail: Inga-Maria.Frick@medkem.lu.se
SO Molecular Microbiology, (2002), 44/4 (917-934), 75 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 10 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34597251 BIOTECHNO
TI Proteolysis and its regulation at the surface of **Streptococcus pyogenes**
AU Rasmussen M.; **Bjorck L.**
CS M. Rasmussen, Section for Molecular Pathogenesis, Department of Cell Biology, Lund University, Lund, Sweden.
E-mail: magnus.rasmussen@medkem.lu.se
SO Molecular Microbiology, (2002), 43/3 (537-544), 71 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; (Short Survey)
CY United Kingdom
LA English
SL English

L6 ANSWER 11 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:35238020 BIOTECHNO
TI Proteinases of common pathogenic bacteria degrade and inactivate the antibacterial peptide LL-37
AU Schmidtchen A.; Frick I.-M.; Andersson E.; Tapper H.; **Bjorck L.**
CS A. Schmidtchen, Section for Dermatology, Department of Medical Microbiology, Biomedical Center, Tornavagen 10, S-22184 Lund, Sweden.
E-mail: artur.schmidtchen@derm.lu.se
SO Molecular Microbiology, (2002), 46/1 (157-168), 49 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English

SL English

L6 ANSWER 12 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2001:32635310 BIOTECHNO
TI Unique regulation of SclB - A novel collagen-like surface protein of **Streptococcus pyogenes**
AU Rasmussen M.; **Bjorck L.**
CS M. Rasmussen, Section for Molecular Pathogenesis, Department of Cell Biology, Lund University, Tornavagen 10, S-221 84 Lund, Sweden. E-mail: Magnus.Rasmussen@medkem.lu.se
SO Molecular Microbiology, (2001), 40/6 (1427-1438), 72 reference(s) CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 13 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2001:32162156 BIOTECHNO
TI Dermatan sulphate is released by proteinases of common pathogenic bacteria and inactivates antibacterial .alpha.-defensin
AU Schmidtchen A.; Frick I.-M.; **Bjorck L.**
CS A. Schmidtchen, Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, Tornavagen 10, Se-22184 Lund, Sweden. E-mail: artur.schmidtchen@derm.lu.se
SO Molecular Microbiology, (2001), 39/3 (708-713), 36 reference(s) CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 14 OF 58 WPIDS (C) 2002 THOMSON DERWENT
AN 2000-365572 [31] WPIDS
DNC C2000-110434
TI New alpha2M binding protein for generating a protective immune response to group A **streptococcus** and purifying the binding protein.
DC B04 D16
IN BJORCK, L H; RASMUSSEN, M; **BJORCK, L; RASSMUSSEN, M**
PA (ACTI-N) ACTINOVA LTD; (BJOR-I) BJORCK L; (RASS-I) RASSMUSSEN M
CYC 91
PI WO 2000026240 A2 20000511 (200031)* EN 67p C07K014-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000010572 A 20000522 (200040) C07K014-00
EP 1144442 A2 20011017 (200169) EN C07K014-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 2002061306 A1 20020523 (200239) A61K039-40
JP 2002528112 W 20020903 (200273) 77p C12N015-09
ADT WO 2000026240 A2 WO 1999-GB3631 19991102; AU 2000010572 A AU 2000-10572 19991102; EP 1144442 A2 EP 1999-954134 19991102, WO 1999-GB3631 19991102; US 2002061306 A1 Cont of WO 1999-GB3631 19991102, US 2001-847539 20010501; JP 2002528112 W WO 1999-GB3631 19991102, JP 2000-579627 19991102
FDT AU 2000010572 A Based on WO 200026240; EP 1144442 A2 Based on WO 200026240; JP 2002528112 W Based on WO 200026240
PRAI GB 1998-23975 19981102
IC ICM A61K039-40; C07K014-00; C12N015-09
ICS A61K039-09; A61K039-395; A61P031-04; C07H021-04; C07K014-315;

C07K016-12; C12N001-15; C12N001-19; C12N001-21; C12N005-10; C12P021-02

L6 ANSWER 15 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2000:30800310 BIOTECHNO
TI SclA, a novel collagen-like surface protein of **Streptococcus pyogenes**
AU Rasmussen M.; Eden A.; **Bjorck L.**
CS M. Rasmussen, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S 221 00 Lund, Sweden. E-mail: magnus.rasmussen@medkem.lu.se
SO Infection and Immunity, (2000), 68/11 (6370-6377), 61 reference(s) CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 16 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2000:30701249 BIOTECHNO
TI Virulent aggregates of **Streptococcus pyogenes** are generated by homophilic protein-protein interactions
AU Frick I.-M.; Morgelin M.; **Bjorck L.**
CS I.-M. Frick, Dept. of Cell and Molecular Biology, Sections for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden. E-mail: inga-maria.frick@medkem.lu.se
SO Molecular Microbiology, (2000), 37/5 (1232-1247), 82 reference(s) CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 17 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1999:29254894 BIOTECHNO
TI Protein GRAB of **Streptococcus pyogenes** regulates proteolysis at the bacterial surface by binding .alpha..sub.2-macroglobulin
AU Rasmussen M.; Muller H.-P.; **Bjorck L.**
CS L. Bjorck, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden. E-mail: lars.bjorck@medkem.lu.se
SO Journal of Biological Chemistry, (1999), 274/22 (15336-15344), 48 reference(s) CODEN: JBCHA3 ISSN: 0021-9258
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 18 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1999:29144387 BIOTECHNO
TI Protein H, an antiphagocytic surface protein in **Streptococcus pyogenes**
AU Kihlberg B.-M.; Collin M.; Olsen A.; **Bjorck L.**
CS B.-M. Kihlberg, Dept. of Cell and Molecular Biology, Umea University, S-901 87 Umea, Sweden. E-mail: Britt-Marie.Kihlberg@cmb.umu.se
SO Infection and Immunity, (1999), 67/4 (1708-1714), 59 reference(s) CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English

SL English

L6 ANSWER 19 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1999:29507319 BIOTECHNO
TI Identification and characterization of a **Streptococcus pyogenes** ABC transporter with multiple specificity for metal cations
AU Janulczyk R.; Pallon J.; **Bjorck L.**
CS L. Bjorck, Department of Cell Molecular Biology, Section for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden. E-mail: lars.bjorck@medkem.lu.se
SO Molecular Microbiology, (1999), 34/3 (596-606), 53 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 20 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1998:28303153 BIOTECHNO
TI Identification of an insertion sequence located in a region encoding virulence factors of **Streptococcus pyogenes**
AU Berge A.; Rasmussen M.; **Bjorck L.**
CS A. Berge, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden. E-mail: Andreas.Berge@medkem.lu.se
SO Infection and Immunity, (1998), 66/7 (3449-3453), 35 reference(s)
CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 21 OF 58 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI
AN 1997-06923 BIOTECHDS
TI New **streptococcal** inhibitor of complement-mediated lysis, protein SIC and DNA;
Streptococcus pyogenes recombinant protein SIC preparation by vector expression and purification by affinity chromatography, monoclonal antibody and DNA probe for use in vaccine and diagnosis
AU Akesson P; **Bjorck L**
PA Hightech-Receptor
LO Malmo, Sweden.
PI WO 9713786 17 Apr 1997
AI WO 1996-SE1238 2 Oct 1996
PRAI SE 1995-3495 9 Oct 1995
DT Patent
LA English
OS WPI: 1997-235840 [21]

L6 ANSWER 22 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1997:27355644 BIOTECHNO
TI **Streptococcal** protein H forms soluble complement-activating complexes with IgG, but inhibits complement activation by IgG-coated targets
AU Berge A.; Kihlberg B.-M.; Sjoholm A.G.; **Bjorck L.**
CS A. Berge, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden. E-mail: andreas.berge@medkem.lu.se
SO Journal of Biological Chemistry, (1997), 272/33 (20774-20781), 58 reference(s)
CODEN: JBCHA3 ISSN: 0021-9258

DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 23 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1997:27438036 BIOTECHNO
TI Absorption of kininogen from human plasma by **Streptococcus pyogenes** is followed by the release of bradykinin
AU Ben Nasr A.; Herwald H.; Sjobring U.; Renne T.; Muller-Esterl W.; **Bjorck L.**
CS L. Bjorck, Department Cell Molecular Biology, Section for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden.
SO Biochemical Journal, (1997), 326/3 (657-660), 0 reference(s)
CODEN: BIJOAK ISSN: 0264-6021
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 24 OF 58 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 96:779464 SCISEARCH
GA The Genuine Article (R) Number: VP233
TI PROTEIN PAB, AN ALBUMIN-BINDING BACTERIAL SURFACE PROTEIN PROMOTING GROWTH AND VIRULENCE
AU DECHATEAU M (Reprint); HOLST E; **BJORCK L**
CS LUND UNIV, DEPT CELL & MOL BIOL, POB 94, S-22100 LUND, SWEDEN (Reprint); LUND UNIV, DEPT MED MICROBIOL, S-22100 LUND, SWEDEN
CYA SWEDEN
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (25 OCT 1996) Vol. 271, No. 43, pp. 26609-26615.
ISSN: 0021-9258.
DT Article; Journal
FS LIFE
LA ENGLISH
REC Reference Count: 41
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L6 ANSWER 25 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1996:26034969 BIOTECHNO
TI Protein SIC, a novel extracellular protein of **Streptococcus pyogenes** interfering with complement function
AU Akesson P.; Sjoholm A.G.; **Bjorck L.**
CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94,S-221 00 Lund, Sweden.
SO Journal of Biological Chemistry, (1996), 271/2 (1081-1088)
CODEN: JBCHA3 ISSN: 0021-9258
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 26 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1996:26198266 BIOTECHNO
TI Assembly of human contact phase proteins and release of bradykinin at the surface of curli-expressing Escherichia coli
AU Nasr A.B.; Olsen A.; Sjobring U.; Muller-Esterl W.; **Bjorck L.**
CS Section for Molecular Pathogenesis, Department of Cell/Molecular Biology, Lund University,Lund, Sweden.
SO Molecular Microbiology, (1996), 20/5 (927-935)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom

LA English
SL English

L6 ANSWER 27 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 20
AN 96297986 EMBASE
DN 1996297986
TI **Streptococcal** cysteine proteinase releases kinins: A novel virulence mechanism.
AU Herwald H.; Collin M.; Muller-Esterl W.; **Bjorck L.**
CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94,S-221 001 Lund, Sweden
SO Journal of Experimental Medicine, (1996) 184/2 (665-673).
ISSN: 0022-1007 CODEN: JEMEAV
CY United States
DT Journal; Article
FS 004 Microbiology
029 Clinical Biochemistry
LA English
SL English

L6 ANSWER 28 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25326742 BIOTECHNO
TI Structure and stability of protein H and the M1 protein from **Streptococcus pyogenes**. Implications for other surface proteins of gram-positive bacteria
AU Nilson B.H.K.; Frick I.-M.; Akesson P.; Forsen S.; **Bjorck L.**; Akerstrom B.; Wikstrom M.
CS Centre for Protein Engineering, MRC Center, Hills Road,Cambridge CB2 2QH, United Kingdom.
SO Biochemistry, (1995), 34/41 (13688-13698)
CODEN: BICHAW ISSN: 0006-2960
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 29 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25135523 BIOTECHNO
TI **Streptococcal** cysteine proteinase releases biologically active fragments of **streptococcal** surface proteins
AU Berge A.; **Bjorck L.**
CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94,S-221 00 Lund, Sweden.
SO Journal of Biological Chemistry, (1995), 270/17 (9862-9867)
CODEN: JBCHA3 ISSN: 0021-9258
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 30 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25146124 BIOTECHNO
TI Protein H - A bacterial surface protein with affinity for both immunoglobulin and fibronectin type III domains
AU Frick I.-M.; Crossin K.L.; Edelman G.M.; **Bjorck L.**
CS Dept Medical Physiological Chemistry, Section for Molecular Pathogenesis, Lund University, PO Box 94,S-221 00 Lund, Sweden.
SO EMBO Journal, (1995), 14/8 (1674-1679)
CODEN: EMJODG ISSN: 0261-4189
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 31 OF 58 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 24
AN 1995:454061 BIOSIS
DN PREV199598468361
TI Multiple ligand interactions for bacterial immunoglobulin-binding proteins on human and murine cells of the hematopoietic lineage.
AU Axcrona, K. (1); **Bjorck, L.**; Leanderson, T.
CS (1) Immunol. Unit, Solvegatan 21, S-223 62 Lund Sweden
SO Scandinavian Journal of Immunology, (1995) Vol. 42, No. 3, pp. 359-367. ISSN: 0300-9475.
DT Article
LA English

L6 ANSWER 32 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:26022897 BIOTECHNO
TI Biological properties of a **Streptococcus pyogenes** mutant generated by Tn916 insertion in mga
AU Kihlberg B.-M.; Cooney J.; Caparon M.G.; Olsen A.; **Bjorck L.**
CS Dept. of Cell/Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94,S-221 00 Lund, Sweden.
SO Microbial Pathogenesis, (1995), 19/5 (299-315)
CODEN: MIPAEV ISSN: 0882-4010
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 33 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25021125 BIOTECHNO
TI Human kininogens interact with M protein, a bacterial surface protein and virulence determinant
AU Ben Nasr A.; Herwald H.; Muller-Esterl W.; **Bjorck L.**
CS Medical and Physiological Chemistry, Lund University, PO Box 94,S-221 00 Lund, Sweden.
SO Biochemical Journal, (1995), 305/1 (173-180)
CODEN: BIJOAK ISSN: 0264-6021
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 34 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1994:24180607 BIOTECHNO
TI M1 protein and protein H: IgGFc- and albumin-binding **streptococcal** surface proteins encoded by adjacent genes
AU Akesson P.; Schmidt K.-H.; Cooney J.; **Bjorck L.**
CS Dept Medical Physiological Chemistry, Lund University,Lund, Sweden.
SO Biochemical Journal, (1994), 300/3 (877-886)
CODEN: BIJOAK ISSN: 0264-6021
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 35 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1994:24197452 BIOTECHNO
TI Protein H - A surface protein of **Streptococcus pyogenes** with separate binding sites for IgG and albumin
AU Frick I.-M.; Akesson P.; Cooney J.; Sjobring U.; Schmidt K.-H.; Gomi H.; Hattori S.; Tagawa C.; Kishimoto F.; **Bjorck L.**
CS Med./Physiological Chemistry Dept., Lund University,Lund, Sweden.
SO Molecular Microbiology, (1994), 12/1 (143-151)

CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 36 OF 58 MEDLINE
AN 92251189 MEDLINE
DN 92251189 PubMed ID: 1578147
TI Protein Arp and protein H from group A **streptococci**. Ig binding and dimerization are regulated by temperature.
AU Akerstrom B; Lindahl G; **Bjorck L**; Lindqvist A
CS Department of Medical and Physiological Chemistry, University of Lund, Sweden.
SO JOURNAL OF IMMUNOLOGY, (1992 May 15) 148 (10) 3238-43.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199206
ED Entered STN: 19920619
Last Updated on STN: 19920619
Entered Medline: 19920609

L6 ANSWER 37 OF 58 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1992:340904 BIOSIS
DN BR43:30454
TI ISOLATION FROM **STREPTOCOCCUS-PYOGENES** OF EXTRACELLULAR M1 PROTEIN WHICH BINDS TO FIBRINOGEN ALBUMIN AND IGG.
AU SCHMIDT K-H; AKESSON P; KOEHLER W; **BJORCK L**
CS CENTRAL INST. MICROBIOL. EXP. THERAPY, JENA, GER.
SO OREFICI, G. (ED.). ZENTRALBLATT FUER BAKTERIOLOGIE SUPPLEMENT, 22. NEW PERSPECTIVES ON STREPTOCOCCI AND STREPTOCOCCAL INFECTIONS; (INTERNATIONAL JOURNAL OF MEDICAL MICROBIOLOGY, 22. NEW PERSPECTIVES ON STREPTOCOCCI AND STREPTOCOCCAL INFECTIONS); XI LANCEFIELD INTERNATIONAL SYMPOSIUM ON STREPTOCOCCI AND STREPTOCOCCAL DISEASES, SIENA, ITALY, SEPTEMBER 10-14, 1990. XIX+569P. GUSTAV FISCHER VERLAG: STUTTGART, GERMANY; NEW YORK, NEW YORK, USA. ILLUS. (1992) 0 (0), 206-207.
CODEN: ZBASE2. ISBN: 3-437-11362-3, 1-56081-333-4.
DT Conference
FS BR; OLD
LA English

L6 ANSWER 38 OF 58 MEDLINE
AN 90340319 MEDLINE
DN 90340319 PubMed ID: 2199820
TI Protein H--a novel IgG binding bacterial protein.
AU Akesson P; Cooney J; Kishimoto F; **Bjorck L**
CS Department of Medical and Physiological Chemistry, University of Lund, Sweden.
SO MOLECULAR IMMUNOLOGY, (1990 Jun) 27 (6) 523-31.
Journal code: 7905289. ISSN: 0161-5890.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199009
ED Entered STN: 19901012
Last Updated on STN: 19901012
Entered Medline: 19900907

L6 ANSWER 39 OF 58 MEDLINE

AN 89097314 MEDLINE
DN 89097314 PubMed ID: 2643059
TI Bacterial growth blocked by a synthetic peptide based on the structure of a human proteinase inhibitor.
AU **Bjorck L**; Akesson P; Bohus M; Trojnar J; Abrahamson M; Olafsson I; Grubb A
CS Department of Medical Microbiology, University of Lund, Sweden.
SO NATURE, (1989 Jan 26) 337 (6205) 385-6.
Journal code: 0410462. ISSN: 0028-0836.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198902
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19890221

L6 ANSWER 40 OF 58 MEDLINE
AN 86264641 MEDLINE
DN 86264641 PubMed ID: 3088909
TI Related bindings of aggregated beta 2-microglobulin, IgG Fab, kappa and lambda light chains to group A **streptococci**.
AU Persson M H; Schalen C; Berggard B; Logdberg L; **Bjorck L**
SO ACTA PATHOLOGICA, MICROBIOLOGICA, ET IMMUNOLOGICA SCANDINAVICA. SECTION B, MICROBIOLOGY, (1986 Feb) 94 (1) 25-31.
Journal code: 8206623. ISSN: 0108-0180.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198608
ED Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860801

L6 ANSWER 41 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 29
AN 84172581 EMBASE
DN 1984172581
TI On the interaction between .beta.2-microglobulin and group A **streptococci**.
AU **Bjorck L.**; Miorner H.; Kuhnemund O.; et al.
CS Department of Medical Microbiology, University of Lund, Lund, Sweden
SO Scandinavian Journal of Immunology, (1984) 20/1 (69-79).
CODEN: SJIMAX
CY Norway
DT Journal
FS 004 Microbiology
026 Immunology, Serology and Transplantation
005 General Pathology and Pathological Anatomy
LA English

L6 ANSWER 42 OF 58 MEDLINE
AN 84175251 MEDLINE
DN 84175251 PubMed ID: 6369874
TI The genetic control of virulence in group A **streptococci**. III. Plasmid-induced "switch-off"--effect on some pathogenic properties.
AU Ravdonikas L E; Christensen P; Burova L A; Grabovskaya K; **Bjorck L**; Schalen C; Svensson M L; Totolian A A
SO ACTA PATHOLOGICA, MICROBIOLOGICA, ET IMMUNOLOGICA SCANDINAVICA. SECTION B, MICROBIOLOGY, (1984 Feb) 92 (1) 65-9.
Journal code: 8206623. ISSN: 0108-0180.
CY Denmark

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198405
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19840524

L6 ANSWER 43 OF 58 MEDLINE
AN 84006973 MEDLINE
DN 84006973 PubMed ID: 6352498
TI Electron microscopic localization of receptors for aggregated beta 2-microglobulin on the surface of beta-hemolytic **streptococci**.
AU Wagner M; Wagner B; Kronvall G; **Bjorck L**
SO INFECTION AND IMMUNITY, (1983 Oct) 42 (1) 326-32.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198311
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19831123

L6 ANSWER 44 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 30
AN 81115471 EMBASE
DN 1981115471
TI .beta.2-Microglobulin is bound to **streptococcal** M protein.
AU **Bjorck L.**; Tylewska S.K.; Wadstrom T.; Kronvall G.
CS Dept. Physiol. Chem., Univ. Lund, S-220 07 Lund 7, Sweden
SO Scandinavian Journal of Immunology, (1981) 13/4 (391-394).
CODEN: SJIMAX
CY Norway
DT Journal
FS 026 Immunology, Serology and Transplantation
004 Microbiology
LA English

L6 ANSWER 45 OF 58 MEDLINE
AN 79087773 MEDLINE
DN 79087773 PubMed ID: 83295
TI Binding of aggregated human beta2-microglobulin to surface protein structure in group A, C, and G **streptococci**.
AU Kronvall G; Myhre E B; **Bjorck L**; Berggard I
SO INFECTION AND IMMUNITY, (1978 Oct) 22 (1) 136-42.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197903
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790313

L6 ANSWER 46 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16476 Protein DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.

PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 47 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16478 Protein DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 48 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16477 Protein DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 49 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16475 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 50 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16474 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 51 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16473 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 52 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16472 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 53 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16471 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 54 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16470 Peptide DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 55 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAT66503 DNA DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.

PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 56 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAT13864 DNA DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 57 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAT66502 DNA DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

L6 ANSWER 58 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAT66501 DNA DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.
PI WO 9713786 A1 19970417 63p
AI WO 1996-SE1238 19961002
PRAI SE 1995-3495 19951009
DT Patent
LA English
OS 1997-235840 [21]

=> s group a streptococcus
  11 FILES SEARCHED...
  19 FILES SEARCHED...
  21 FILES SEARCHED...
  30 FILES SEARCHED...
  39 FILES SEARCHED...
  45 FILES SEARCHED...
  47 FILES SEARCHED...
  55 FILES SEARCHED...
  56 FILES SEARCHED...
L7 20110 GROUP A STREPTOCOCCUS

=> s l1 and (pyrogenes)

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  46 FILES SEARCHED...
L8            0 L1 AND (PYROGENES)

=> s l1 and (surface protein)
  13 FILES SEARCHED...
  20 FILES SEARCHED...
  29 FILES SEARCHED...
  41 FILES SEARCHED...
  54 FILES SEARCHED...
L9            0 L1 AND (SURFACE PROTEIN)

=> l7 and  (alpha zm binding protein)
L7 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l7 and  (alpha zm binding protein)
  11 FILES SEARCHED...
  19 FILES SEARCHED...
  22 FILES SEARCHED...
  33 FILES SEARCHED...
  43 FILES SEARCHED...
  55 FILES SEARCHED...
L10           2 L7 AND (ALPHA ZM BINDING PROTEIN)

=> d l10 1-2

L10  ANSWER 1 OF 2  IFIPAT  COPYRIGHT 2002 IFI
AN    10117699  IFIPAT;IFIUDB;IFICDB
TI    STREPTOCOCCAL ALPHA ZM BINDING
      PROTEIN
IN    Bjorck Lars (SE); Rassmussen Magnus (SE)
PA    Unassigned Or Assigned To Individual (68000)
PI    US 2002061306   A1  20020523
AI    US 2001-847539      20010501
PRAI  GB 1998-239759      19981102
FI    US 2002061306       20020523
DT    Utility; Patent Application - First Publication
FS    CHEMICAL
      APPLICATION
CLMN  22
GI     11 Figure(s).
     FIG. 1. The binding of radiolabeled alpha 2M to 109 bacteria of different
      strains of S. pyogenes grown to early stationary phase is presented in A
      (bars represent +SEM, n=3). In B the binding of radiolabeled alpha 2M to
      2 x 108 KTL3 bacteria was competed with alpha 2M and with protein G
      (+/-SD, n=3). In C the scatchard plot for the reaction between alpha 2M
      and 109 KTL3 bacteria is shown. The shape of the plot suggests two
      binding sites with different affinities (Ka=2.0 x 108M-1 and 5. 3 x
      106M-1 respectively).
     FIG. 2. A schematic comparison between protein GRAB and protein G is shown
      in A. The complete nucleotide and amino acid sequence of grab/protein
      GRAB is shown in B.
     FIG. 3. Different strains of S. pyogenes were subjected to PCR and the
      results are set out in (A). From all strains, except from the AP9 strain,
      a product of between 500 and 850 bp in size could be amplified (A).
      Schematic comparison of the mature protein GRAB (amino acids 34-188 in
      FIG. 2B) encoded by these strains is shown in B.
     FIG. 4. MBP-GRAB was used to inhibit the binding of radiolabeled alpha 2M
      to 2 x 108 KTL3 bacteria. Similarly one synthetic peptide (aa 34-56 in
      FIG. 2B) was able to compete for the binding of alpha 2M although less
      efficiency that MBP-GRAB, while an overlapping peptide (aa 51-68 in FIG.
```

2B) did not compete for the binding. Bars represent +/-SD, n=3.
FIG. 5. An internal fragment of grab, lacking the part of the gene coding for the cell wall attachment, was cloned into the streptococcal suicide plasmid pFW13 to generate FW-grab. pFWgrab was transformed into KTL3 bacteria, to generate MR4. MR4 was completely devoid of alpha 2M binding as shown (+SD, n=3).
FIG. 6. The binding of the radiolabeled fibrinogen was measured after trypsin treatment of KTL3 or MR4 bacteria. Some bacteria were preincubated with alpha 2M (+ alpha 2M) and some were not. As can be seen, preincubation of KTL3 with alpha 2M protected the M protein, and thus fibrinogen binding, from trypsin degradation. alpha 2M pretreatment of MR4 did not affect the fibrinogen binding (+SD n=3).
FIG. 7. Radiolabeled and activated SCP was added to KTL3 (1), MR4 (3), or the same bacteria preincubated with alpha 2M (2 and 4 respectively). The binding of SCP was significantly higher to KTL3 bacteria that had been preincubated with alpha 2M (+SD, n=3).
FIG. 8. Shows the results of an assay of sheep anti-DSP 18. peptide sera on a GRAB coated plate.
FIG. 9. Shows the results of ELISA using
FIG. 10. Shows the serum antibody response in mice immunised with a protein or peptide of the invention.
FIG. 11. Shows the results of opsonization of log phase **group** A **streptococcus** by sera to a protein or peptide of the invention.

L10 ANSWER 2 OF 2 USPATFULL
AN 2002:119326 USPATFULL
TI Streptococcal **alpha ZM binding protein**
IN Bjorck, Lars, Lund, SWEDEN
Rassmussen, Magnus, Lund, SWEDEN
PI US 2002061306 A1 20020523
AI US 2001-847539 A1 20010501 (9)
RLI Continuation of Ser. No. WO 1999-GB3631, filed on 2 Nov 1999, UNKNOWN
PRAI GB 1998-23975 19981102
DT Utility
FS APPLICATION
LN.CNT 1925
INCL INCLM: 424/150.100
INCLS: 530/388.400; 536/023.530; 435/069.100
NCL NCLM: 424/150.100
NCLS: 530/388.400; 536/023.530; 435/069.100
IC [7]
ICM: A61K039-40
ICS: C07K016-12; C07H021-04; C12P021-02
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s l7 and (surface proteins)
21 FILES SEARCHED...
41 FILES SEARCHED...
56 FILES SEARCHED...
L11 270 L7 AND (SURFACE PROTEINS)

=> s l11 and (protein g)
13 FILES SEARCHED...
21 FILES SEARCHED...
35 FILES SEARCHED...
47 FILES SEARCHED...
L12 13 L11 AND (PROTEIN G)

=> dup rem
ENTER L# LIST OR (END):l12
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, BIOCOMMERCE, DGENE,

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DRUGLAUNCH, DRUGMONOG2, DRUGUPDATES, FEDRIP, FOREGE, GENBANK, KOSMET,
MEDICONF, PHAR, PHARMAML, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L12
L13          13 DUP REM L12 (0 DUPLICATES REMOVED)

=> d his

     (FILE 'HOME' ENTERED AT 11:31:42 ON 22 NOV 2002)

     FILE 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
     CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DGENE, DRUGB,
     DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, .' ENTERED AT
     11:32:14 ON 22 NOV 2002
                E BJORCK L/AU
                E RASSMUSSEN M/AU
L1             8 S E3
                E BJORCK L/AU
L2         1073 S E3
L3         1080 S L1 OR L2
L4          475 S L3 AND (STREPTOCOCC?)
L5          168 S L4 AND (PYOGENES)
L6           58 DUP REM L5 (110 DUPLICATES REMOVED)
L7        20110 S GROUP A STREPTOCOCCUS
L8            0 S L1 AND (PYROGENES)
L9            0 S L1 AND (SURFACE PROTEIN)
L10           2 S L7 AND  (ALPHA ZM BINDING PROTEIN)
L11         270 S L7 AND (SURFACE PROTEINS)
L12          13 S L11 AND (PROTEIN G)
L13          13 DUP REM L12 (0 DUPLICATES REMOVED)

=> d bib ab

L13  ANSWER 1 OF 13  USPATFULL
AN     2002:272801  USPATFULL
TI     Compositions and methods for the therapy and diagnosis of colon cancer
IN     Stolk, John A., Bothell, WA, UNITED STATES
       Xu, Jiangchun, Bellevue, WA, UNITED STATES
       Chenault, Ruth A., Seattle, WA, UNITED STATES
       Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA     Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI     US 2002150922      A1   20021017
AI     US 2001-998598     A1   20011116 (9)
PRAI   US 2001-304037P     20010710 (60)
       US 2001-279670P     20010328 (60)
       US 2001-267011P     20010206 (60)
       US 2000-252222P     20001120 (60)
DT     Utility
FS     APPLICATION
LREP   SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
       SEATTLE, WA, 98104-7092
CLMN   Number of Claims: 17
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Compositions and methods for the therapy and diagnosis of cancer,
       particularly colon cancer, are disclosed. Illustrative compositions
       comprise one or more colon tumor polypeptides, immunogenic portions
       thereof, polynucleotides that encode such polypeptides, antigen
       presenting cell that expresses such polypeptides, and T cells that are
       specific for cells expressing such polypeptides. The disclosed
```

compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

=> d bib ab 2-13

L13 ANSWER 2 OF 13 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

L13 ANSWER 3 OF 13 USPATFULL
AN 2002:164409 USPATFULL
TI Streptococcal streptolysin S vaccines
IN Dale, James B., Memphis, TN, UNITED STATES
PA University of Tennessee Research Corporation, Knoxville, TN, 37996-1527 (U.S. corporation)
PI US 2002086023 A1 20020704
AI US 2001-975455 A1 20011010 (9)
PRAI US 2000-239432P 20001010 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 53
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 2684
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are streptolysin S (SLS) polypeptides, peptides, and variants thereof, antibodies directed thereto, and isolated nucleic acids encoding such proteins. In one embodiment, a method is provided wherein a synthetic peptide of SLS is used to elicit an immune response specific for SLS in a subject to treat or prevent a streptococcal infection. In other embodiments, antibodies that neutralize the hemolytic activity of the SLS toxin may be used as a vaccinating agent.

L13 ANSWER 4 OF 13 USPATFULL
AN 2002:157785 USPATFULL
TI Opsonic and protective monoclonal and chimeric antibodies specific for

lipoteichoic acid of gram positive bacteria
IN Fischer, Gerald W., Bethesda, MD, UNITED STATES
Schuman, Richard F., Gaithersburg, MD, UNITED STATES
Wong, Hing, Weston, FL, UNITED STATES
Stinson, Jeffrey R., Davie, FL, UNITED STATES
PA Sunol Molecular Corporation (U.S. corporation)
PI US 2002082395 A1 20020627
AI US 2001-893615 A1 20010629 (9)
RLI Division of Ser. No. US 1998-97055, filed on 15 Jun 1998, PENDING
PRAI US 1997-49871P 19970616 (60)
DT Utility
FS APPLICATION
LREP FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 2428
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention encompasses monoclonal and chimeric antibodies that bind to lipoteichoic acid of Gram positive bacteria. The antibodies also bind to whole bacteria and enhance phagocytosis and killing of the bacteria in vitro and enhance protection from lethal infection in vivo. The mouse monoclonal antibody has been humanized and the resulting chimeric antibody provides a previously unknown means to diagnose, prevent and/or treat infections caused by gram positive bacteria bearing lipoteichoic acid. This invention also encompasses a peptide mimic of the lipoteichoic acid epitope binding site defined by the monoclonal antibody. This epitope or epitope peptide mimic identifies other antibodies that may bind to the lipoteichoic acid epitope. Moreover, the epitope or epitope peptide mimic provides a valuable substrate for the generation of vaccines or other therapeutics.

L13 ANSWER 5 OF 13 USPATFULL
AN 2002:119326 USPATFULL
TI Streptococcal alpha ZM binding protein
IN Bjorck, Lars, Lund, SWEDEN
Rassmussen, Magnus, Lund, SWEDEN
PI US 2002061306 A1 20020523
AI US 2001-847539 A1 20010501 (9)
RLI Continuation of Ser. No. WO 1999-GB3631, filed on 2 Nov 1999, UNKNOWN
PRAI GB 1998-23975 19981102
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 1925
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein is described which is capable of binding to .alpha..sub.2 macro globulin. The protein comprises the amino acid sequence of SEQ ID No: 1 or a functional variant thereof. The invention also relates to a peptide comprising a fragment of the protein of at least six amino acids in length. A protein or peptide which is capable of generating a protective immune response to **Group A streptococcus** comprises the amino acid sequence of SEQ ID No: 1, a functional variant thereof or a functional variant of at least six amino acids in length of either thereof. Such a protein or peptide may be used in a vaccine composition together with a pharmaceutically acceptable carrier.

L13 ANSWER 6 OF 13 USPATFULL
AN 2002:174798 USPATFULL
TI Antigen of hybrid M protein and carrier for Group A streptococccal vaccine
IN Dale, James B., Memphis, TN, United States
PA University of Tennessee Research Corporation, Knoxville, TN, United States (U.S. corporation)
PI US 6419932 B1 20020716
AI US 1997-914479 19970819 (8)
RLI Continuation of Ser. No. US 1995-409270, filed on 23 Mar 1995, now abandoned Continuation of Ser. No. US 1992-945860, filed on 16 Sep 1992, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Smith, Lynette R. F.; Assistant Examiner: Baskar, Padma
LREP Seed Intellectual Property Law Group PLLC
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1494
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Recombinant hybrid streptococcal M protein antigens are provided which elicit protective antibodies against Group A streptococci and prevent rheumatic fever. Recombinant hybrid genes which encode the antigen are provided. Vaccine compositions and methods of administering the compositions are provided to elicit immunity against Group A streptococci.

L13 ANSWER 7 OF 13 USPATFULL
AN 2002:50826 USPATFULL
TI Fibronectin and fibrinogen binding protein from group A streptococci
IN Fischetti, Vincent A., West Hempstead, NY, United States
Rocha, Claudia, New York, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)
PI US 6355477 B1 20020312
AI US 1999-327536 19990608 (9)
RLI Continuation-in-part of Ser. No. US 1996-714402, filed on 16 Sep 1996, now patented, Pat. No. US 5910441
DT Utility
FS GRANTED
EXNAM Primary Examiner: Navarro, Mark
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1136
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to a novel fibrinogen and fibronectin binding protein from group A streptococci, and the DNA encoding the protein. The protein and its DNA are useful in the preparation of compositions for the diagnosis, treatment, and prevention of streptococcal infection.

L13 ANSWER 8 OF 13 USPATFULL
AN 2000:141891 USPATFULL
TI Bacterial plasmin receptors as fibrinolytic agents
IN Boyle, Michael D. P., Whitehouse, OH, United States
Lottenberg, Richard, Gainesville, FL, United States
Broder, Christopher, Rockville, MD, United States
Von Mering, Gregory, Gainesville, FL, United States
PA University of Florida Research Foundation, Inc., Gainesville, FL, United States (U.S. corporation)

PI US 6136323 20001024
AI US 1994-273247 19940711 (8)
RLI Division of Ser. No. US 1992-928462, filed on 10 Aug 1992, now patented, Pat. No. US 5328996 which is a continuation-in-part of Ser. No. US 1990-524411, filed on 16 May 1990, now patented, Pat. No. US 5237050 which is a continuation-in-part of Ser. No. US 1989-330849, filed on 29 Mar 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Ryan, V.
LREP Saliwanchik, Lloyd & Saliwanchik
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1597
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject invention concerns novel methods and compositions for thrombolytic therapy. More specifically, a receptor with high affinity for plasmin has been characterized, purified, cloned, and expressed. This receptor can be used in combination therapies where it is administered prior to, concurrently with, or after a plasminogen activator. Also, this receptor can be bound to plasmin and administered to humans or animals in need of fibrinolytic activity. Additionally, the invention pertains to a novel immobilized form of plasmin which advantageously accumulates at the point where antifibrinolytic activity is needed.

L13 ANSWER 9 OF 13 USPATFULL
AN 1999:128379 USPATFULL
TI Method for screening inhibitors of the enzyme which cleaves the anchor of **surface proteins** from gram positive bacteria
IN Fischetti, Vincent A., West Hempstead, NY, United States
Pancholi, Vijaykumar, New York, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)
PI US 5968763 19991019
AI US 1997-819444 19970317 (8)
RLI Continuation-in-part of Ser. No. US 1994-319540, filed on 7 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Weber, Jon P.
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 995
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to an enzyme which cleaves **surface proteins** of gram-positive bacteria, to methods of detecting the enzyme, and methods of isolating the enzyme. In particular, the enzyme is isolated from a **group A Streptococcus**, and cleaves at the sequence LPXTGX (SEQ ID NO:1). A method for screening putative inhibitors of the enzyme which cleaves the anchor region of **surface proteins** from gram positive bacteria is also disclosed.

L13 ANSWER 10 OF 13 USPATFULL
AN 1999:65197 USPATFULL
TI DNA encoding fibronectin and fibrinogen binding protein from group A streptococci
IN Rocha, Claudia, New York, NY, United States
Fischetti, Vincent A., West Hempstead, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)

PI US 5910441 19990608
AI US 1996-714402 19960916 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Navarro, Mark
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to a novel fibrinogen and fibronectin binding protein from group A streptococci, and the DNA encoding the protein. The protein and its DNA are useful in the preparation of compositions for the diagnosis, treatment, and prevention of streptococcal infection.

L13 ANSWER 11 OF 13 USPATFULL
AN 1998:135155 USPATFULL
TI Bacterial receptor structures
IN Nilsson, Bjorn, Sollentuna, Sweden
Nygren, Per-.ANG.ke, Skarpnack, Sweden
Uhlen, Mathias, Upsala, Sweden
PA Pharmacia & Upjohn Aktiebolag, Stockholm, Sweden (non-U.S. corporation)
PI US 5831012 19981103
WO 9519374 19950720
AI US 1996-669360 19960815 (8)
WO 1995-SE34 19950116
19960815 PCT 371 date
19960815 PCT 102(e) date
PRAI SE 1994-88 19940114
DT Utility
FS Granted
EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Masood, Khalid
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 22 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 1016
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel proteins obtainable by mutagenesis of surface-exposed amino acids of domains of natural bacterial receptors, said proteins being obtained without substantial loss of basic structure and stability of said natural bacterial receptors; proteins which have been selected from a protein library embodying a repertoire of said novel proteins; and methods for the manufacture of artificial bacterial receptor structures.

L13 ANSWER 12 OF 13 USPATFULL
AN 97:20384 USPATFULL
TI Virulence-encoding DNA sequences of Strepococcus suis and related products and methods
IN Smith, Hilda E., Cz Lelystad, Netherlands
Vecht, Uri, As Ermelo, Netherlands
PA Centraal Diergeneeskundig Instituut, PH Lelystad, Netherlands (non-U.S. corporation)
PI US 5610011 19970311
WO 9216630 19920110
AI US 1993-119125 19930920 (8)
WO 1992-NL54 19920319
19930920 PCT 371 date
19930920 PCT 102(e) date
PRAI NL 1991-510 19910321
DT Utility
FS Granted

EXNAM Primary Examiner: Campell, Bruce R.
LREP Handal & Morofsky
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 2515
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides DNA sequences which code for polypeptides which are characteristic for the virulence of the pathogenic bacterium Streptococcus suis and parts thereof, and polypeptides and antibodies derived therefrom. The sequences code for a polypeptide of 90,000-120,000 daltons or a polypeptide of higher molecular weight containing such a polypeptide, and for a polypeptide of 135,000-136,000 daltons (muramidase released protein), or parts thereof. The sequences themselves, and also the polypeptides and antibodies derived therefrom, are used for diagnosis of and protection against infection by S. suis in mammals, including man.

L13 ANSWER 13 OF 13 USPATFULL
AN 94:60245 USPATFULL
TI Bacterial plasmin receptors as fibrinolytic agents
IN Boyle, Michael D. P., Whitehouse, OH, United States
Lottenberg, Richard, Gainesville, FL, United States
Broder, Christopher, Rockville, MD, United States
Von Mering, Gregory, Gainesville, FL, United States
PA University of Florida Research Foundation, Inc., Gainesville, FL, United States (U.S. corporation)
PI US 5328996 19940712
AI US 1992-928462 19920810 (7)
RLI Continuation-in-part of Ser. No. US 1990-524411, filed on 16 May 1990, now patented, Pat. No. US 5237050 which is a continuation-in-part of Ser. No. US 1989-330849, filed on 29 Mar 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ziska, Suzanne E.
LREP Saliwanchik & Saliwanchik
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1522
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject invention concerns novel methods and compositions for thrombolytic therapy. More specifically, a receptor with high affinity for plasmin has been characterized, purified, cloned, and expressed. This receptor can be used in combination therapies where it is administered prior to, concurrently with, or after a plasminogen activator. Also, this receptor can be bound to plasmin and administered to humans or animals in need of fibrinolytic activity. Additionally, the invention pertains to a novel immobilized form of plasmin which advantageously accumulates at the point where antifibrinolytic activity is needed.

=> d his

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DRUGLAUNCH, DRUGMONOG2, DRUGUPDATES, FEDRIP, FOREGE, GENBANK, KOSMET,
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MEDICONF, PHAR, PHARMAML, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING IS APPROXIMATELY 47% COMPLETE FOR L2
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21 FILES SEARCHED...
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L4 ANSWER 1 OF 16 AGRICOLA
AN 97:2432 AGRICOLA
DN IND20539407
TI A protein G-related cell surface protein in **Streptococcus** zooepidemicus.
AU Jonsson, H.; Lindmark, H.; Guss, B.
CS Swedish University of Agricultural Sciences, Uppsala, Sweden.
AV DNAL (QR1.I57)
SO Infection and immunity, Aug 1995. Vol. 63, No. 8. p. 2968-2975
Publisher: Washington, D.C., American Society for Microbiology
ISSN: 0019-9567
NTE Includes references
CY District of Columbia; United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L4 ANSWER 2 OF 16 AGRICOLA
AN 94:69988 AGRICOLA
DN IND20417788
TI MAG, a novel plasma protein receptor from **Streptococcus** dysgalactiae.
AU Jonsson, H.; Frykberg, L.; Rantamaki, L.; Guss, B.
AV DNAL (QH442.A1G4)
SO Gene, 1994. Vol. 143, No. 1. p. 85-89
Publisher: Amsterdam : Elsevier Science Publishers.
CODEN: GENED6; ISSN: 0378-1119
NTE Includes references
CY Netherlands
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L4 ANSWER 3 OF 16 BIOBUSINESS COPYRIGHT 2002 BIOSIS
AN 97:74281 BIOBUSINESS
DN 0931816
TI Shot-gun phage display mapping of two streptococcal cell-surface proteins.
AU Jacobsson K; Jonsson H; Lindmark H; Guss B; Lindberg M; Frykberg L
CS Dep. Microbiol., Swedish Univ. Agricultural Sciences, Box 7025, S-750 07 Uppsala, Sweden.
SO Microbiological Research, (1997) Vol.152, No.2, p.121-128.

ISSN: 0944-5013.
DT ARTICLE
FS NONUNIQUE
LA English

L4 ANSWER 4 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1997:444283 BIOSIS
DN PREV199799743486
TI Shot-gun phage display mapping of two streptococcal cell-surface proteins.
AU Jacobsson, Karin; Jonsson, Hans; Lindmark, Hans; Guss, Bengt; Lindberg, Martin; Frykberg, Lars (1)
CS (1) Dep. Microbiol., Swedish Univ. Agricultural Sciences, Box 7025, S-750 07 Uppsala Sweden
SO Microbiological Research, (1997) Vol. 152, No. 2, pp. 121-128.
ISSN: 0944-5013.
DT Article
LA English

L4 ANSWER 5 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1995:320334 BIOSIS
DN PREV199598334634
TI Streptococcal protein MAG-a protein with broad albumin binding specificity.
AU Jonsson, Hans; Burtsoff-Asp, Christina; Guss, Bengt (1)
CS (1) Dep. Microbiol., Swedish Univ. Agric. Sci., Box 7025, S-750 07 Uppsala Sweden
SO Biochimica et Biophysica Acta, (1995) Vol. 1249, No. 1, pp. 65-71.
ISSN: 0006-3002.
DT Article
LA English

L4 ANSWER 6 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1987:424819 BIOSIS
DN BA84:91481
TI NOVEL COMPLEX FORMED BETWEEN A NONPROTEOLYTIC CELL WALL PROTEIN OF GROUP A STREPTOCOCCI AND ALPHA-2 MACROGLOBULIN.
AU CHHATWAL G S; ALBOHN G; BLOBEL H
CS INST. FUER BAKTERIOLOGIE UND IMMUNOL., JUSTUS-LIEBIG-UNIV., D-63000 GIESSEN, FEDERAL REPUBLIC OF GERMANY.
SO J BACTERIOL, (1987) 169 (8), 3691-3695.
CODEN: JOBAAY. ISSN: 0021-9193.
FS BA; OLD
LA English

L4 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1999:349300 CAPLUS
DN 131:141811
TI Protein GRAB of **Streptococcus** pyogenes regulates proteolysis at the bacterial surface by binding .alpha.2-macroglobulin
AU Rasmussen, Magnus; Muller, Hans-Peter; Bjorck, Lars
CS Department of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, Lund, S-221 00, Swed.
SO Journal of Biological Chemistry (1999), 274(22), 15336-15344
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1990:550657 CAPLUS
DN 113:150657

TI Role of .alpha.2-macroglobulin in phagocytosis of group A and C streptococci
AU Valentin-Weigand, Peter; Traore, Modibo Y.; Blobel, Hans; Chhatwal, Gursharan S.
CS Inst. Bakteriol. Immunol., Justus-Liebig-Univ., Giessen, Germany
SO FEMS Microbiology Letters (1990), 70(3), 321-4
CODEN: FMLED7; ISSN: 0378-1097
DT Journal
LA English

L4 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1986:440320 CAPLUS
DN 105:40320
TI Binding of human .alpha.2-macroglobulin to streptococci of group A, B, C and G
AU Mueller, H. P.; Blobel, H.
CS Inst. Bakteriol. Immunol., Justus-Liebig-Univ., Giessen, 6300, Fed. Rep. Ger.
SO Recent Adv. Streptococci Streptococcal Dis., Proc. Lancefield Int. Symp. Streptococci Streptococcal Dis., 9th (1985), Meeting Date 1984, 96-8. Editor(s): Kimura, Yoshitami; Kotani, Shozo; Shiokawa, Yuichi. Publisher: Reedbooks, Bracknell, UK.
CODEN: 55BSAN
DT Conference
LA English

L4 ANSWER 10 OF 16 GENBANK.RTM. COPYRIGHT 2002

LOCUS (LOC): AE014157 GenBank (R)
GenBank ACC. NO. (GBN): AE014157 AE014074
GenBank VERSION (VER): AE014157.1 GI:21904768
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SEQUENCE LENGTH (SQL): 51454
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Bacteria
DATE (DATE): 19 Jul 2002
DEFINITION (DEF): **Streptococcus** pyogenes MGAS315, section 22 of 37 of the complete genome.
SOURCE: **Streptococcus** pyogenes MGAS315.
ORGANISM (ORGN): **Streptococcus pyogenes MGAS315**
Bacteria; Firmicutes; Lactobacillales; Streptococcaceae; **Streptococcus**
NUCLEIC ACID COUNT (NA): 15734 a 10645 c 9037 g 16038 t
REFERENCE: 1 (bases 1 to 51454)
AUTHOR (AU): Beres,S.B.; Sylva,G.L.; Barbian,K.D.; Lei,B.; Hoff,J.S.; Mammarella,N.D.; Liu,M.-Y.; Smoot,J.C.; Porcella,S.F.; Parkins,L.D.; McCormick,J.K.; Leung,D.Y.M.; Schlievert,P.M.; Musser,J.M.
TITLE (TI): Genome sequence of a serotype M3 strain of group A **Streptococcus**: Phage-encoded toxins, the high-virulence phenotype, and clone emergence
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (15), 10078-10083 (2002)
REFERENCE: 2 (bases 1 to 51454)
AUTHOR (AU): Beres,S.B.; Sylva,G.L.; Barbian,K.D.; Lei,B.; Hoff,J.S.; Mammarella,N.D.; Liu,M.-Y.; Smoot,J.C.; Porcella,S.F.; Parkins,L.D.; McCormick,J.K.; Leung,D.Y.M.; Schlievert,P.M.; Musser,J.M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (14-JUN-2002) Laboratory of Human-Bacterial Pathogenesis, Rocky Mountain Laboratories, NIAID, NIH, 903 South Fourth St., Hamilton, MT 59840, USA

FEATURES (FEAT):

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                                     /note="SpyM3-1036"
CDS             7244..8185           /gene="birA"
                                     /note="best blastp hit:
                                     gb|AAK34189.1| (AE006574) putative
                                     biotin operon repressor
                                     [Streptococcus pyogenes M1 GAS]"
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                                     repressor"
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                                     /db-xref="GI:21904773"
                                     /translation="MKTSEKIYQLLSQTDDFVSG
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                                     LYLAPSQEAAKGRLDRQFFSASTGGIYMSMYLKP
                                     NVPYADMPPYTMMVASSIVKAISR
                                     LTGIDTEIKWVNDIYLGNHKVAGILTEAITSVET
                                     GLITDVIIGVGLNFFVTDFPEAIA
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                                     VKVYKEKSLVLNKQVTFIENSQEK
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gene            complement(8160..8444)  /gene="SpyM3-1037"
CDS             complement(8160..8444)  /gene="SpyM3-1037"
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                                     gb|AAK74993.1| (AE007392)
                                     hypothetical protein
                                     [Streptococcus pneumoniae TIGR4],
                                     and gb|AAK99574.1| (AE008452)
                                     hypothetical protein
                                     [Streptococcus pneumoniae R6]"
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                                     /protein-id="AAM79644.1"
                                     /db-xref="GI:21904774"
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                                     YFFNDLLLSGNYLFALFWGLLLFRDLRRVHTINQ
                                     LTKTILKTANSPKKKD"
gene            complement(8448..10118) /gene="dnaX"
                                     /note="SpyM3-1038"
CDS             complement(8448..10118) /gene="dnaX"
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                                     gb|AAL97971.1| (AE010058) DNA
                                     polymerase III gamma/tau subunits
                                     [Streptococcus pyogenes MGAS8232]"
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                                     /protein-id="AAM79645.1"
                                     /db-xref="GI:21904775"
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                                        IRDIRDKSTYAPSRATYKVYIIDEVHMLSTGAFN
                                        ALLKTLEEPTENVVFILATTELHK
                                        IPATILSRVQRFEFKAIKQKAIREHLAWVLDKEG
                                        IAYEVDALNLIARRAEGGMRDALS
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                                        VRYVSQEQATQALAALETIYDSGK
                                        SMSRFATDLLTYLRDLLVVKAGGDNQRQSAVFDT
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                                        KGTHPRIYAEMMTIQLAQKEQILSQANLSGELIS
                                        EIETLKNELAQLKQQLSQLQSRPD
                                        SLARSDKTKPKTASYRVDRVTILKIMEETVRNSQ
                                        QSRQYLDALKNAWNEILDNISAQD
                                        RALLMGSEPVLANSENAILAFEAAFNAEQVMSRN
                                        NLNDMFGNIMSKAAGFSPNILAVP
                                        RTDFQHIRKEFAQQMKSQKDSVQEEQEVALDIPE
                                        GFDFLLDKINTIDD"
gene            complement(10118..10681 /gene="SpyM3-1039"
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CDS             complement(10118..10681 /gene="SpyM3-1039"
                )
                                        /note="best non-GAS blastp hit:
                                        gb|AAK06294.1|AE006448-12
                                        (AE006448) hypothetical protein
                                        [Lactococcus lactis subsp.
                                        lactis]"
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                                        /transl-table=11
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                                        ESAQSRRTIIINDVKQHANYISCDAAAMSEIVVP
                                        MVKEGHLIGVLDLDSSLVADYDEV
                                        DQEYLEAFVDLFLEKTTFTFNMFGVKN"
gene            10760..11569            /gene="SpyM3-1040"
CDS             10760..11569            /gene="SpyM3-1040"
                                        /note="best non-GAS blastp hit:
                                        gb|AAK98831.1| (AE008387)
                                        hypothetical protein
                                        [Streptococcus pneumoniae R6]"
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gene            complement(11622..11885 /gene="SpyM3-1041"
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CDS             complement(11622..11885 /gene="SpyM3-1041"
                )
                                    /note="best non-GAS blastp hit:
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                                    conserved hypothetical protein
                                    [Streptococcus pneumoniae TIGR4]"
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                                    /transl-table=11
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                                    protein"
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                                    /db-xref="GI:21904778"
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                                    AFDKRKAIKKKRRISERNLLVITV
                                    LFGGFGALLAAKKYHHKTRKWYFVITWYTSILLT
                                    LLVTYIFMK"
gene            complement(11965..12591 /gene="udk"
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                                    /note="SpyM3-1042"
CDS             complement(11965..12591 /gene="udk"
                )
                                    /note="best blastp hit:
                                    sp|Q99Z70|URK-STRPY Uridine kinase
                                    (Uridine monophosphokinase)
                                    (Cytidine monophosphokinase), and
                                    gb|AAK34195.1| (AE006574) putative
                                    uridine kinase [Streptococcus
                                    pyogenes M1 GAS]"
                                    /codon-start=1
                                    /transl-table=11
                                    /product="putative uridine kinase"
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                                    /db-xref="GI:21904779"
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                                    DQSHMSFEERVKTNYDHPLAFDTDFMIQQLKELL
                                    AGRPVDIPIYDYKKHTRSNTTFRQ
                                    DPQDVIIVEGILVLEDERLRDLMDIKLFVDTDDD
                                    IRIIRRIKRDMMERGRSLESIIDQ
                                    YTSVVKPMYHQFIEPSKRYADIVIPEGVSNVVAI
                                    DVINSKIASILGEV"
gene            12689..13774            /gene="deaD.2"
                                    /note="SpyM3-1043"
CDS             12689..13774            /gene="deaD.2"
                                    /note="best blastp hit:
                                    gb|AAL97976.1| (AE010058) putative
                                    RNA helicase [Streptococcus
                                    pyogenes MGAS8232]"
                                    /codon-start=1
                                    /transl-table=11
                                    /product="putative RNA helicase"
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                                    /db-xref="GI:21904780"
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                                    TSQKRQIERLKKGPEILIGTPGRIFELIKLKKIK
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                                    QKISHYVPRDHQMVYMSATNKVDQTSLAPNTFCI
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                                     DLSEQTNDAIQHFYLMVDKRERTD
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                                     NYTHRAGRTGRMGKSGIVITFVSH
                                     PEDLKKLKKFAKVSETSLKNQQLHFIN"
gene            complement(13884..15158 /gene="SpyM3-1044"
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CDS             complement(13884..15158 /gene="SpyM3-1044"
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                                     /note="best non-GAS blastp hit:
                                     gb|AAL00137.1| (AE008503)
                                     Peptidoglycan GlcNAc deacetylase
                                     [Streptococcus pneumoniae R6]"
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                                     GlcNAc deacetylase"
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                                     /db-xref="GI:21904781"
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                                     SSHLRSVNTLTISKIVYQKKFFHLAKKSEKVIST
                                     YHVTDDLKPFQVRDLVSGHLERIQ
                                     EEVEKKYPNAGFNSDKYNGLKESNSLLSDGFEVK
                                     SGNLIFDKKLTIPLTTLFDVINPD
                                     FLANSDRAAYDNYRTYKEQHPKKLVALTFDDGPD
                                     PTTTPQVLDILAKYQAKGTFFMIG
                                     SKVVNNENLTKRVSDAGHEIANHTWDHPNLTNLS
                                     VSEIQHQVNMTNQAIEKACGKKPR
                                     YLRPPYGATNATVQQSSGLTQMLWTVDTRDWENH
                                     STDGIMTNVKNQLQPGGVVLMHDI
                                     HQTTINALPTVMEYLKAEGYECVTVSELYAHQ"
gene            complement(15253..16656 /gene="gapN"
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                                     /note="SpyM3-1045"
CDS             complement(15253..16656 /gene="gapN"
                )
                                     /note="best blastp hit:
                                     gb|AAL97978.1| (AE010058) putative
                                     NADP-dependent
                                     glyceraldehyde-3-phosphate
                                     dehydrogenase [Streptococcus
                                     pyogenes MGAS8232]"
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                                     /transl-table=11
                                     /product="putative NADP-dependent
                                     glyceraldehyde-3-phosphate
                                     dehydrogenase"
                                     /protein-id="AAM79652.1"
                                     /db-xref="GI:21904782"
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                                     AAEEGLRMEGEVLEGGSFEAASKKKIAIVRREPV
                                     GLVLAISPFNYPVNLAGSKIAPAL
                                     IAGNVVALKPPTQGSISGLLLAEAFAEAGIPAGV
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                                     EPFGPVLPIIRVTTVEEAIKISNE
                                     SEYGLQASIFTTNFPKAFGIAEQLEVGTVHLNNK
                                     TQRGTDNFPFLGAKKSGAGVQGVK
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gene            complement(16865..18589 /gene="ptsI"
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                                     /note="SpyM3-1046"
CDS             complement(16865..18589 /gene="ptsI"
                )
                                     /note="best blastp hit:
                                     gb|AAK34199.1| (AE006575) putative
                                     phosphoenolpyruvate:sugar
                                     phosphotransferase system enzyme I
                                     [Streptococcus pyogenes M1 GAS],
                                     and gb|AAL97979.1| (AE010058)
                                     putative phosphoenolpyruvate:sugar
                                     PTS enzyme I [Streptococcus
                                     pyogenes MGAS8232]"
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                                     phosphotransferase system enzyme
                                     I"
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                                     DLTPSDTAQLNKQFVKAFVTNIGGRTSHSAIMAR
                                     TLEIAAVLGTNDITKRVKDGDVIA
                                     VNGITGEVIIDPSEDQVLAFKEAGAAYAKQKAEW
                                     SLLKDAHTETADGKHFELAANIGT
                                     PKDVEGVNDNGAEAVGLYRTEFLYMDSQDFPTED
                                     EQYEAYKAVLEGMNGKPVVVRTMD
                                     IGGDKELPYFDLPKEMNPFLGFRALRISISETGD
                                     AMFRTQMRALLRASVHGQLRIMFP
                                     MVALLKEFRAAKAVFDEEKANLLAEGVAVADDIQ
                                     VGIMIEIPAAAMLADQFAKEVDFF
                                     SIGTNDLIQYTMAADRMNEQVSYLYQPYNPSILR
                                     LINNVIKAAHAEGKWAGMCGEMAG
                                     DQQAVPLLVGMGLDEFSMSATSVLRTRSLMKKLD
                                     SAKMEEYANRALTECSTAEEVLEL SKEYVSED"
gene            complement(18603..18866 /gene="ptsH"
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                                     /note="SpyM3-1047"
CDS             complement(18603..18866 /gene="ptsH"
                )
                                     /note="best blastp hit:
                                     sp|P24366|PTHP-STRSL
                                     Phosphocarrier protein HPr
                                     (Histidine-containing protein),
                                     and prf||2120381A ptsH gene
                                     [Streptococcus salivarius]"
                                     /codon-start=1
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                                     phosphotransferase system
                                     phosphohistidine-containing
                                     protein"
                                     /protein-id="AAM79654.1"
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                                     ETMTKEGLA"
gene            19226..19477         /gene="nrdH"
                                     /note="SpyM3-1048"
CDS             19226..19477         /gene="nrdH"
                                     /note="best blastp hit:
                                     gb|AAK34201.1| (AE006575) putative
                                     glutaredoxin [Streptococcus
                                     pyogenes M1 GAS], involved in
                                     electron transport system for
                                     ribonucleotide reductase system"
                                     /codon-start=1
                                     /transl-table=11
                                     /product="putative
                                     glutaredoxin-like protein"
                                     /protein-id="AAM79655.1"
                                     /db-xref="GI:21904785"
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                                     LKELI"
gene            19497..21656         /gene="nrdE.1"
                                     /note="SpyM3-1049"
CDS             19497..21656         /gene="nrdE.1"
                                     /note="best blastp hit:
                                     gb|AAL97982.1| (AE010059) putative
                                     ribonucleotide reductase
                                     alpha-chain [Streptococcus
                                     pyogenes MGAS8232]"
                                     /codon-start=1
                                     /transl-table=11
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                                     reductase 2 alpha subunit"
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                                     YQQYALKTNDGEHYLENLEDRVLFNALYFADGQE
                                     DLAKDLAVEMINQRYQPATPSFLN
                                     AGRSRRGELVSCFLIQVTDDMNSIGRSINSALQL
                                     SRIGGGVGITLSNLREAGAPIKGY
                                     AGAASGVVPVMKLFEDSFSYSNQLGQRQGAGVVY
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                                     VKSLFKDHFIPQASDWEALRDAVQ
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CDS             21989..22948         /gene="nrdF.1"
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                                     reductase small subunit
                                     [Streptococcus pyogenes M1 GAS]"
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                                     reductase 2 beta subunit"
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                                     INDIYANGDALQKKVASTYLETFL
                                     FYSGFFTPLYYLGNNKLANVAEIIKLIIRDESVH
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                                     SDDDYNYGL"
gene            22923..24236         /gene="SpyM3-1051"
CDS             22923..24236         /gene="SpyM3-1051"
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                                     [Streptococcus pyogenes MGAS8232];
                                     similar to EriC of Corynebacterium
                                     glutamicum"
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                                     LLAKKGKDIQSIQQIIQDDISFSPWTQFWHGWLQ
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                                     TSYVAVATVALLQGRHEIQYLMPQQHWTLGTLIW
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                                     ADAKSQWLIPKVLIAFSLIAGLSIFFPEILGNGK
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                                     VAISLVFASGAKGGKIAPSMMLGGASGLLLAILS
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gene            24374..24667            /gene="SpyM3-1052"
CDS             24374..24667            /gene="SpyM3-1052"
                                        /note="N-terminal portion; blastp
                                        hit: pir||S14450 probable
                                        transposase - Lactococcus lactis
                                        subsp. lactis insertion sequence
                                        IS1076; possible pseudogene aligns
                                        with N-terminal portion of
                                        transposase"
                                        /codon-start=1
                                        /transl-table=11
                                        /product="putative transposase"
                                        /protein-id="AAM79659.1"
                                        /db-xref="GI:21904789"
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                                        EEQPVKMVSSTLEIHPNSLYQWIQ
                                        EYEKYGESAFPGHGSALRHAQFETKKLEKEHKLL
                                        QEELALLKKFQVFLKPNRK"
gene            24700..24996            /gene="SpyM3-1053"
CDS             24700..24996            /gene="SpyM3-1053"
                                        /note="central portion; blastp
                                        hit: emb|CAA55219.1| (X78469)
                                        orfA; orfA and orfB are possibly
                                        translated as one large
                                        transposase protein through a
                                        frameshift motif [Lactococcus
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                                        GLYAKGSRYQYKYYNRRRSS"
gene            25099..25524            /gene="SpyM3-1054"
CDS             25099..25524            /gene="SpyM3-1054"
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                                        blastp hit: emb|CAA55220.1|
                                        (X78469) orfB; orfA and orfB are
                                        possibly translated as one large
                                        transposase protein through a
                                        frameshift motif [Lactococcus
                                        lactis]; possible pseudogene
                                        aligns with C-terminal portion of
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                                        DNALMESFYKTLKKELVNDAHFAT
                                        IEQAKLEIFKYSETCYNPKRLHSALGYLSPVEFE
                                        KIVTH"
gene            complement(25621..26316 /gene="SpyM3-1055"
                )
CDS             complement(25621..26316 /gene="SpyM3-1055"
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                )
                                        /note="best non-GAS blastp hit:
                                        dbj|BAB43118.1| (AP003135)
                                        conserved hypothetical protein
                                        [Staphylococcus aureus subsp.
                                        aureus N315], and dbj|BAB58193.1|
                                        (AP003364) conserved hypothetical
                                        protein [Staphylococcus aureus
                                        subsp. aureus Mu50]"
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                                        /transl-table=11
                                        /product="conserved hypothetical
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                                        WSGQQVSANDAAIHTLARLIKGGFPLYTALFVLV
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gene            complement(26335..27096 /gene="SpyM3-1056"
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CDS             complement(26335..27096 /gene="SpyM3-1056"
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                                        [Streptococcus pneumoniae TIGR4]"
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gene            complement(27093..27308 /gene="SpyM3-1057"
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CDS             complement(27093..27308 /gene="SpyM3-1057"
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                                        repressor"
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                                     /note="SpyM3-1058"
CDS             complement(27667..30144 /gene="alaS"
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                                     (AlaRS), and gb|AAK34208.1|
                                     (AE006576) putative alanyl-tRNA
                                     synthetase [Streptococcus pyogenes
                                     M1 GAS]"
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gene            complement(30672..31727 /gene="prtM.1"
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CDS             complement(30672..31727 /gene="prtM.1"
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CDS         complement(31790..32422  /gene="SpyM3-1060"
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                                     AADILSTLEGNFDFVFMDSAKSKYIVFLPEILRL
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                                     IRRGQRTIYRGLQSLFDATLTHPNLTTSLVPLSD
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gene        complement(32563..33759  /gene="SpyM3-1061"
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CDS         complement(32563..33759  /gene="SpyM3-1061"
            )
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                                     oxalate:formate antiporter
                                     [Streptococcus pyogenes M1 GAS],
                                     and gb|AAL97993.1| (AE010060)
                                     putative oxalateformate antiporter
                                     [Streptococcus pyogenes MGAS8232]"
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gene            complement(37212..37877 /gene="SpyM3-1064"
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CDS             complement(37212..37877 /gene="SpyM3-1064"
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gene            38953..39981         /gene="queA"
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CDS             38953..39981         /gene="queA"
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                                     ribosyltransferase-isomerase
                                     [Streptococcus pyogenes MGAS8232]"
                                     /codon-start=1
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                                     KGVHLVYLTLHVGLGTFRPVSVDN
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gene            39988..41208         /gene="SpyM3-1067"
CDS             39988..41208         /gene="SpyM3-1067"
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gene            complement(41322..41912
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CDS             complement(41322..41912
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                                     BETA-LACTAMASE BRO-1 PRECURSOR
                                     (PENICILLINASE), and
                                     gb|AAA92126.1| (U49269)
                                     beta-lactamase BRO-1 [Moraxella
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CDS             complement(41909..42157 /gene="SpyM3-1069"
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gene            complement(43238..44278 /gene="holA"
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CDS             complement(43238..44278 /gene="holA"
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                                        [Streptococcus pyogenes], and
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                                        polymerase III delta subunit
                                        [Streptococcus pyogenes M1 GAS]"
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gene            complement(44349..46592 /gene="comEC"
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CDS             complement(44349..46592 /gene="comEC"
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CDS                  complement(46573..47235 /gene="comEA"
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L4 ANSWER 11 OF 16 GENBANK.RTM. COPYRIGHT 2002

LOCUS (LOC): AE006573 GenBank (R)
GenBank ACC. NO. (GBN): AE006573 AE004092
GenBank VERSION (VER): AE006573.1 GI:13622459
CAS REGISTRY NO. (RN): 331700-16-4
SEQUENCE LENGTH (SQL): 10029
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Bacteria
DATE (DATE): 1 Jun 2001
DEFINITION (DEF): **Streptococcus** pyogenes M1 GAS strain SF370, section 102 of 167 of the complete genome.
SOURCE: **Streptococcus** pyogenes M1 GAS.
ORGANISM (ORGN): **Streptococcus pyogenes M1 GAS**

Bacteria; Firmicutes; Bacillus/Clostridium group;
Lactobacillales; Streptococcaceae;
Streptococcus

NUCLEIC ACID COUNT (NA): 3029 a 2125 c 1632 g 3243 t

REFERENCE: 1 (bases 1 to 10029)
AUTHOR (AU): Ferretti,J.J.; McShan,W.M.; Adjic,D.; Savic,D.; Savic,G.; Lyon,K.; Primeaux,C.; Sezate,S.S.; Surorov,A.N.; Kenton,S.; Lai,H.; Lin,S.; Qian,Y.; Jia,H.G.; Najar,F.Z.; Ren,Q.; Zhu,H.; Song,L.; White,J.; Yuan,X.; Clifton,S.W.; Roe,B.A.; McLaughlin,R.E.
TITLE (TI): Complete genome sequence of an M1 strain of **Streptococcus** pyogenes
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 98 (8), 4658-4663 (2001)
OTHER SOURCE (OS): CA 134:306044

REFERENCE: 2 (bases 1 to 10029)
AUTHOR (AU): Ferretti,J.J.; McShan,W.M.; Adjic,D.; Savic,D.; Savic,G.; Lyon,K.; Primeaux,C.; Sezate,S.S.; Surorov,A.N.; Kenton,S.; Lai,H.; Lin,S.; Qian,Y.; Jia,H.G.; Najar,F.Z.; Ren,Q.; Zhu,H.; Song,L.; White,J.; Yuan,X.; Clifton,S.W.; Roe,B.A.; McLaughlin,R.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (10-APR-2001) Department of Microbiology and Immunology, University of Oklahoma Health Sciences Center, 940 SL Young Blvd, Oklahoma City, OK 73104, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
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L4 ANSWER 12 OF 16 IFIPAT COPYRIGHT 2002 IFI
AN 10117699 IFIPAT;IFIUDB;IFICDB
TI STREPTOCOCCAL ALPHA ZM BINDING PROTEIN
IN Bjorck Lars (SE); Rassmussen Magnus (SE)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002061306 A1 20020523
AI US 2001-847539 20010501
PRAI GB 1998-239759 19981102
FI US 2002061306 20020523
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 22
GI 11 Figure(s).
FIG. 1. The binding of radiolabeled **alpha 2M** to 109 bacteria of different strains of **S. pyogenes** grown to

early stationary phase is presented in A (bars represent +SEM, n=3). In B the binding of radiolabeled **alpha 2M** to 2 x 108 KTL3 bacteria was competed with **alpha 2M** and with protein G (+/-SD, n=3). In C the scatchard plot for the reaction between **alpha 2M** and 109 KTL3 bacteria is shown. The shape of the plot suggests two binding sites with different affinities (Ka=2.0 x 108M-1 and 5. 3 x 106M-1 respectively).

FIG. 2. A schematic comparison between protein GRAB and protein G is shown in A. The complete nucleotide and amino acid sequence of grab/protein GRAB is shown in B.

FIG. 3. Different strains of **S. pyogenes** were subjected to PCR and the results are set out in (A). From all strains, except from the AP9 strain, a product of between 500 and 850 bp in size could be amplified (A). Schematic comparison of the mature protein GRAB (amino acids 34-188 in FIG. 2B) encoded by these strains is shown in B.

FIG. 4. MBP-GRAB was used to inhibit the binding of radiolabeled **alpha 2M** to 2 x 108 KTL3 bacteria. Similarly one synthetic peptide (aa 34-56 in FIG. 2B) was able to compete for the binding of **alpha 2M** although less efficiency that MBP-GRAB, while an overlapping peptide (aa 51-68 in FIG. 2B) did not compete for the binding. Bars represent +/-SD, n=3.

FIG. 5. An internal fragment of grab, lacking the part of the gene coding for the cell wall attachment, was cloned into the streptococcal suicide plasmid pFW13 to generate FW-grab. pFWgrab was transformed into KTL3 bacteria, to generate MR4. MR4 was completely devoid of **alpha 2M** binding as shown (+SD, n=3).

FIG. 6. The binding of the radiolabeled fibrinogen was measured after trypsin treatment of KTL3 or MR4 bacteria. Some bacteria were preincubated with **alpha 2M** (+ **alpha 2M**) and some were not. As can be seen, preincubation of KTL3 with **alpha 2M** protected the M protein, and thus fibrinogen binding, from trypsin degradation. **alpha 2M** pretreatment of MR4 did not affect the fibrinogen binding (+SD n=3).

FIG. 7. Radiolabeled and activated SCP was added to KTL3 (1), MR4 (3), or the same bacteria preincubated with **alpha 2M** (2 and 4 respectively). The binding of SCP was significantly higher to KTL3 bacteria that had been preincubated with **alpha 2M** (+SD, n=3).

FIG. 8. Shows the results of an assay of sheep anti-DSP 18. peptide sera on a GRAB coated plate.

FIG. 9. Shows the results of ELISA using

FIG. 10. Shows the serum antibody response in mice immunised with a protein or peptide of the invention.

FIG. 11. Shows the results of opsonization of log phase group A **streptococcus** by sera to a protein or peptide of the invention.

L4 ANSWER 13 OF 16 IFIPAT COPYRIGHT 2002 IFI
AN 3364897 IFIPAT;IFIUDB;IFICDB
TI DNA ENCODING F **ALPHA-2M**-BINDING PROTEIN AND PROTEIN ENCODED THEREBY; DNA ISOLATED FROM **STREPTOCOCCUS** CELLS WHICH ENCODES A SURFACE PROTEIN CAPABLE OF BINDING A PLASMA PROTEINASE INHIBITOR; FOR AFFINITY PURIFICATION AND DIAGNOSTIC TESTS
IN Guss Bengt (SE); Jonsson Hans (SE); Lindberg Martin (SE); Mueller Hans-Peter (SE); Rantamaki Liisa K (FI)
PA Unassigned Or Assigned To Individual (68000)
PI US 6100055 20000808
WO 9507296 19950316
AI US 1996-669408 19960703
WO 1994-SE826 19940906
19960703 PCT 371 date
19960703 PCT 102(e) date
PRAI SE 1993-2855 19930906
FI US 6100055 20000808

DT UTILITY
FS CHEMICAL
GRANTED
CLMN 28
GI 12 Drawing Sheet(s), 8 Figure(s).

L4 ANSWER 14 OF 16 MEDLINE
AN 91032903 MEDLINE
DN 91032903 PubMed ID: 1699839
TI Role of alpha 2-macroglobulin in phagocytosis of group A and C streptococci.
AU Valentin-Weigand P; Traore M Y; Blobel H; Chhatwal G S
CS Institut fur Bakteriologie und Immunologie, Justus-Liebig-Universitat, Giessen, F.R.G.
SO FEMS MICROBIOLOGY LETTERS, (1990 Aug) 58 (3) 321-4.
Journal code: 7705721. ISSN: 0378-1097.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199012
ED Entered STN: 19910208
Last Updated on STN: 19960129
Entered Medline: 19901221

L4 ANSWER 15 OF 16 USPATFULL
AN 2002:213736 USPATFULL
TI Neutrokine-alpha and Neutrokine-alpha splice variant
IN Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ullrich, Stephen, Rockville, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2002115112 A1 20020822
AI US 2001-929493 A1 20010815 (9)
RLI Continuation-in-part of Ser. No. US 2000-588947, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589285, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589286, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589287, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-586288, filed on 2 Jun 2000, PATENTED Continuation-in-part of Ser. No. US 2000-507968, filed on 22 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-255794, filed on 23 Feb 1999, PENDING Continuation-in-part of Ser. No. US 1999-255794, filed on 23 Feb 1999, PENDING
PRAI US 2000-225628P 20000815 (60)
US 2000-227008P 20000823 (60)
US 2000-234338P 20000922 (60)
US 2000-240806P 20001017 (60)
US 2000-250020P 20001130 (60)
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US 2001-293499P 20010525 (60)
US 2001-296122P 20010607 (60)
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US 1999-127598P 19990402 (60)
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US 1999-131278P 19990427 (60)

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       US 1999-167239P     19991124 (60)
       US 1999-168624P     19991203 (60)
       US 1999-171108P     19991216 (60)
       US 1999-171626P     19991223 (60)
       US 2000-176015P     20000114 (60)
DT     Utility
FS     APPLICATION
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INCL   INCLM: 435/007.200
       INCLS: 530/388.230; 424/145.100
NCL    NCLM:  435/007.200
       NCLS:  530/388.230; 424/145.100
IC     [7]
       ICM: C07K016-24
       ICS: G01N033-567; G01N033-53; A61K039-395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 16 OF 16  WPIDS (C) 2002 THOMSON DERWENT
AN   2000-365572 [31]   WPIDS
DNC  C2000-110434
TI   New alpha2M binding protein for generating a protective immune response to
     group A streptococcus and purifying the binding protein.
DC   B04 D16
IN   BJORCK, L H; RASMUSSEN, M; BJORCK, L; RASSMUSSEN, M
PA   (ACTI-N) ACTINOVA LTD; (BJOR-I) BJORCK L; (RASS-I) RASSMUSSEN M
CYC  91
PI   WO 2000026240 A2 20000511 (200031)* EN   67p    C07K014-00
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            TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
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     EP 1144442    A2 20011017 (200169)  EN          C07K014-00
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            RO SE SI
     US 2002061306 A1 20020523 (200239)              A61K039-40
     JP 2002528112 W  20020903 (200273)       77p    C12N015-09
ADT  WO 2000026240 A2 WO 1999-GB3631 19991102; AU 2000010572 A AU 2000-10572
     19991102; EP 1144442 A2 EP 1999-954134 19991102, WO 1999-GB3631 19991102;
     US 2002061306 A1 Cont of WO 1999-GB3631 19991102, US 2001-847539 20010501;
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FDT  AU 2000010572 A Based on WO 200026240; EP 1144442 A2 Based on WO
     200026240; JP 2002528112 W Based on WO 200026240
PRAI GB 1998-23975    19981102
IC   ICM  A61K039-40; C07K014-00; C12N015-09
     ICS  A61K039-09; A61K039-395; A61P031-04; C07H021-04; C07K014-315;
          C07K016-12; C12N001-15; C12N001-19; C12N001-21; C12N005-10;
          C12P021-02


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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
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STN INTERNATIONAL LOGOFF AT 08:10:07 ON 03 DEC 2002
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